

IV.—*On some new Species of Quadrupeds and Shells.* By
JOHN EDWARD GRAY.

THE British Museum has lately purchased some very interesting skins of Quadrupeds from Sierra Leone, among which are the following new species.

Antilope Zebra, Gray. Back bright fulvous fawn with broad glossy black transverse stripes, beneath pale fulvous; outer side of legs grey-brown, darker beneath.—This is evidently the animal described by my late friend E. T. Bennett in the Proc. Comm. Science Zool. Soc., vol. ii. p. 123, from a very imperfect skin: the one now in the Museum has the tail complete, and shows that he was quite correct in thinking that it was probably an antelope, and it is certainly the most brilliant of that beautiful genus. His specimen was said to come from Algoa Bay, but this is probably a mistake, as that in the Museum was sent direct from Sierra Leone.

Felis neglecta, Gray. Fur very short, brownish grey, with small close blackish spots; smaller, more elongated, and closer together down the rather darker dorsal line; sides rather paler; throat, belly, and inside of limbs white with larger black spots and stripes; nape darker, with close narrow rather darker lines; outer side of legs and feet brownish grey not spotted; tail rather slender, about half the length of the body, grey-brown with a darker central line and varied darker on the sides. Length of body, 3 feet; tail, 15 inches.—*Hab.* Sierra Leone.

Unfortunately we have only an imperfect skin, wanting the face and claws, of this highly interesting animal, which must be as large as a small leopard. Among the skins received there is one also of another cat, very like the common domestic cat in appearance, but so regularly and peculiarly marked, as to make me inclined to believe it to be a distinct species, or a very decided variety.

I will here describe some new Shells from the same country.

Apporrhais Senegalensis, Gray. Shell regular, spirally striated; the upper whorls with one central, and the last with two subcentral, series of small nodules, with a series of much smaller tubercles in front of them; outer lip, with two acute expanded lobes. Axis 13^{'''}.—Sierra Leone. My cabinet.

Fusus elegans, Gray. Shell fusiform, white; whorls nine,

ventricose, rounded, with rather distant, acute, raised, narrow, brown topped spiral ridges, and regular broad rounded plaits; canal subcylindrical, rather shorter than the spire; inner lip rather raised with a few slight plaits, outer lip crenated; throat grooved. Axis 2".—Sierra Leone. Brit. Mus. and my cabinet.

Fusus niveus, Gray. Shell ovate, fusiform, regularly and closely spirally grooved; spire conical; whorls with a subposterior series of nodules and shelving to the suture; apex small, subcylindrical, blunt; canal short, rather oblique, inner lip rather thickened, smooth; throat grooved. Axis 15^{'''}.—Sierra Leone. My cabinet.

SYNTYPES 473178 *Nassa vitrea*, Gray. Shell ovate, turreted, transparent, with distant spiral striæ; whorls with equidistant nodulose varices, and a subanterior brown spiral band; outer lip thickened, white, with a brown spot in front. Axis 5^{'''}.—Sierra Leone. Brit. Mus. and my cabinet.

Cardium læve, Gray. Shell ovate-cordate, ventricose, pale brown, reddish spotted, smooth, with thirty to thirty-one very indistinct flat radiating ribs; lozenge smooth ovate-lanceolate. Very like *Cardium levigatum*, but more ventricose.—Sierra Leone. Brit. Mus.

Turbinella spinosa, Gray. Shell fusiform, white, covered with a smooth brown periostracum; whorls 7, upper ones with a series of conical tubercles, the last with distinct spiral ridges and a subposterior series of conical spires; canal subcylindrical with the mouth about as long as the spire; throat ridged; pillar with three very slight plaits. Axis 15^{'''}.—Sierra Leone. My cabinet.

DRILLIA, Gray. (Pleurotomina.) Shell turreted; mouth oval, linear; inner lip thickened, outer lip inflexed, thickened behind, with a deep thick-edged posterior sinus, and a small sinus in front, just before the short rather recurved canal.

Drillia umbilicata, Gray. Shell white, closely and spirally striated; spire acute, half as long again as the mouth; whorls slightly raised, with a series of transverse compressed tubercles, the last with 6 or 7 larger tubercles; axis umbilicated; lips sharp-edged; mouth reddish white. Axis 15^{'''}.—Sierra Leone. Brit. Mus. and my cabinet.

Drillia clathrata, Gray. Shell dark brown, closely and spi-

rally ridged and concentrically plaited; axis slightly perforated; outer lip strongly thickened behind; canal short. Axis 1¹/₈.—*Hab.* ——— ? My cabinet.

Drillia bicolor, Gray. Shell black, spirally striated, with a subposterior series of angular tubercles crossed with a yellow spiral band; inner lip thickened; mouth slate colour. Axis 4¹/₁₁.—*Hab.* ——— ? My cabinet.

Drillia suturalis, Gray. Shell yellowish white, closely spirally striated; whorls with a posterior groove near the suture, the upper whorls slightly nodulose; outer lip thickened behind; canal rather elongate, scarcely recurved.—*Hab.* ——— ? My cabinet.

DEMOULIA, Gray, n. g. (*Buccinidæ*). Shell ovate, subglobose, covered with a downy periostracum; spire short, conical; apex papillary; whorls compressed; mouth ovate; inner lip thickened, with a ridge behind, outer lip contracted, thicker externally, not variced, strongly plaited internally; canal short, sharply recurved.—Intermediate between *Nassa* and *Dolium*, but differs from both in being covered with a velvety periostracum, in having no distinct varices, in the large size of the spire, and in the contraction of the mouth.

TYPE
3177
Demoulia pulchra, Gray. Pale reddish, covered with a brown periostracum, slightly spirally striated; outer lip white, inner lip smooth; spire short; upper whorls rounded; suture deep. Axis 10¹/₁₁.—Sierra Leone. My cabinet.

Buccinum retusum, Lam. Encyc. Mét. n. 24. t. 394. f. 3, and perhaps the fossil *Buccinum Pupa* and *B. glabratum*, should be referred to this genus; the latter has the inner lip strongly toothed or plaited, which unites it to *Nassa*.

Pleurotoma tenuis, Gray. Shell fusiform, thin, pale, brownish, pellucid; whorls with a broad smooth posterior sutural concave band, convex in front, and marked with arched transverse ridges; canal tapering; mouth and canal nearly as long as the spire; axis with a linear perforation in front. Axis 2¹/₁₁.—Sierra Leone. (My cabinet.) 1377.

*Mactra Sauliana**, Gray. Shell ovate-elongate, compressed,

* I have named this species in honour of Miss Saul of Poplar, a most industrious and liberal collector of shells, to whom I am indebted for this species.

thin, pellucid, pale, with whitish rays and darker submarginal streaks; covered with a thin pale brown laminar periostracum; lunule and lozenge smooth, keeled; lateral teeth very thin.—*Hab.* China.

Very like *M. Helvacea*, but smaller and much more compressed.

V.—*Prodromus of a Monograph of the Radiata and Echinodermata.* By LOUIS AGASSIZ, D.M.*

HAVING had occasion for some years to examine a great number of Echinodermata, and having paid particular attention to their general organization, but more especially to the solid portions of their integument, which have been hitherto considered the most important of their external characteristics, I have felt induced by these circumstances, and others no less favourable to inquiries of this kind, to publish the following outline of a survey of the genera of this class as an introduction to a more general and critical work, in which I purpose hereafter to treat of all the species and their comparative anatomy.

The section of radiated animals to which the Echinodermata belong, should, in order to be characterised in a general manner, be reduced to three classes: the Polypi, the Acalephæ, and the Echinodermata. Intestinal worms, and a great part, if not the whole, of the Infusoria should be restored to the section of articulated animals. That I may not be compelled for a moment to lose sight of the main object of this paper, I think it advisable, as M. de Blainville has already proposed some of these changes, to refer for information as to the limitation of these classes to the article "Zoophytes" in the 'Dictionnaire des Sciences Naturelles,' though there are several points of detail on which he and I disagree.

The class of the Echinodermata confined within its natural limits should contain no more than the three genera *Holothuria*, *Echinus*, and *Asterias* of Linnæus, which have become the

* Translated from the extract in the 'Annales des Sciences Naturelles,' Mai 1837, taken from the 'Mémoires de la Société des Sciences Naturelles de Neufchâtel,' tome i.